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February 22, 2006

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DATE:	FEBRUARY 21, 2006	TIME:	4:30 p.m.
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
HONG et al.

Examiner: POLLACK, Melvin H.

Art Unit: 2145

Serial No.: 09/921,460

Confirmation No.: 7012

Filed: August 3, 2001

Atty. Docket No.: 4366-50

FOR: HIGH PERFORMANCE SERVER FARM WITH TAGGING AND PIPELINING"

CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I HEREBY CERTIFY THAT THE ATTACHED CORRESPONDENCE IS BEING FACSIMILE TRANSMITTED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE VIA FACSIMILE NO. (571) 273-2885, ON: **February 22, 2006**.

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE (6 PAGES).

Claudia Mendoza

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	09/921,460
Applicant	:	HONG et al.
Filed:	:	August 3, 2001
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Examiner:	:	ARTHUR-JEANGLAUDE, GERTRUDE
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Title:	:	"HIGH PERFORMANCE SERVER FARM WITH TAGGING AND PIPELINING"

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage via first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on: February 22, 2006.

TYPED OR PRINTED NAME: Claudia Mendoza

SIGNATURE: Claudia Mendoza

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

Dear Sir:

Applicant submits this Comments on Statement of Reasons for Allowance to address further the Notice of Allowability ("Notice") having a mailing date of 1/31/2006.

In the Notice, the Examiner's stated reasons for allowance for claims 1, 11, 25, 32, 45, and 54 were that "the server generates a tag in response to a transaction, said to be transmitted and stored on the client, and to further be transmitted with every subsequent transaction, for the purpose of switching transaction requests among a plurality of servers such that the client subsequently returns to the same server" and, for claims 36 and 42, that "an information or cache server tracks information request frequencies for the purpose of determining which information should be retrieved prior to subsequent transaction requests and therefore placed in more accessible memory areas" with the frequency being determined by tracking information requests by hot reference

counters. Based on the Notice, the patentability of all other independent and dependent claims is assumed to be based upon the elements as set forth in such claims and that such claims meet all criteria for patentability under §101, §102, §103 and §112.

As is clear from MPEP 1302.14,

> "The statement [of reasons for allowance] is not intended to necessarily state all the reasons for allowance or all the details why claims are allowed and should not be written to specifically or impliedly state that all the reasons for allowance are set forth."

While Applicant agrees that the above-stated is a reason for allowing some independent claims, Applicant submits that some independent claims have a different reason for allowance and that some independent claims have other reasons for allowance.

Specifically, the prior art fails to teach the following features of each of the referenced independent claims:

> 1. A network switch for switching transaction requests among a plurality of servers, the network switch being positioned between the plurality of servers and at least one client, comprising:
>
> a parser operable to parse transaction requests to locate one or more selected fields;
>
> a router operable to forward at least portions of the transaction requests to respective servers in the plurality of servers and transaction responses of the respective servers to the transaction requests to respective clients; and
>
> a tag generator operable to generate a tag associated with a selected server in the plurality of servers and include the tag in a transaction response received from the selected server, the transaction response comprising information requested by a transaction request and a cookie generated by the selected server, whereby, when a subsequent transaction request is received from the client corresponding to the tagged transaction request, the subsequent transaction request includes the tag and the cookie and, based on the tag, the router forwards the subsequent transaction request to the selected server.

> 11. A method for switching transaction requests, comprising:
>
> receiving, from a first source, a transaction response associated with first source, the transaction response corresponding to at least a first transaction request;
>
> parsing the transaction response to locate at least a first field;
>
> determining a first tag identifying the first source;
>
> appending the first tag to the first field in the transaction response;

reassembling the transaction response;

forwarding the transaction response to a destination identified by the transaction response, wherein the first source is a first server in a plurality of servers and the destination is a client;

receiving the transaction response after the forwarding step;

storing the first tag in the client's memory;

forwarding a second transaction request to an address associated with the first server, the second transaction request including the first tag;

receiving the second transaction request from the client;

parsing for the first field in the second transaction request; and

forwarding the second transaction request to the first server based on the first tag.

25. A system for switching transaction requests among a plurality of servers, comprising:

an input port for receiving, from a first server in the plurality of servers, a transaction response of the first server, the transaction response corresponding to at least a first transaction request;

means for parsing the transaction response to locate at least a first field;

means for determining a first tag identifying the first server;

means for appending the first tag to the first field in the transaction response;

means for reassembling the transaction response;

means for forwarding the transaction response to a client identified by the transaction response;

a second input port for receiving the transaction response from the forwarding means;

means for storing the first tag in the client's memory; and

means for forwarding a second transaction request to an address associated with the first server, the second transaction request including the first tag, wherein each server in the plurality of servers has a unique identifier and the first tag is based on the unique identifier associated with the first server.

32. A system, comprising:

a communications network;

a plurality of replicated servers connected to the network, all of the replicated servers having a same network address and all of the replicated servers serving the same replicated information, each of the replicated servers being configured to receive a first transaction request associated with an individual transaction and to provide a response to the first transaction request, the response including a first tag that corresponds to the transaction, the first tag being a cookie generated by a first replicated server; and

a network switch connecting the replicated servers to the network, the network switch being configured to generate a second tag associated with the first replicated server, to append the second tag to the first tag in the response, and to direct to the first replicated server subsequently received transaction requests including the first and second tags.

36. A method for providing information from a server to a client, comprising:

receiving a first transaction request requesting first information, the first information referencing at least second and third information;

retrieving the first information;

providing the first information to the client;

determining which of the second and third information has been more frequently requested by clients during a first selected time interval;

retrieving the more frequently requested of the second and third information and/or an address associated therewith;

thereafter receiving a second transaction request from the client requesting the more frequently requested of the second and third information; and

providing the more requested of the second and third information to the client.

42. In a cache server having a plurality of memory addresses for storing information, a first set of memory addresses being more accessible than a second set of memory addresses and both the first and second sets of addresses being in a common cache server, a method comprising:

comparing first and second hot reference counters corresponding to first and second information to determine which of the first and second information is more frequently requested, wherein the comparison of the first and second hot reference counters indicates that the first information has been more frequently requested, over a first selected time interval, than the second information; and

storing the first information at an address in the first set of memory addresses and the second information at an address in the second set of memory addresses;

thereafter, comparing the first and second hot reference counters to determine which of the first and second information is more frequently requested, wherein the comparison of the first and second hot reference counters indicates that the second information has been more frequently requested, over a second selected time interval, than the first information; and

storing the second information at an address in the first set of memory addresses and the first information at an address in the second set of memory addresses.

45. A method for switching transaction requests, comprising:

receiving, from a first source, a transaction response associated with first source, the transaction response corresponding to at least a first transaction request;

parsing the transaction response to locate at least a first field;

determining a first tag identifying the first source;

appending the first tag to the first field in the transaction response;

reassembling the transaction response;

forwarding the transaction response to a destination identified by the transaction response;

receiving a second transaction request;

parsing the second transaction request for at least the first field;

determining a digest value based on field information in the at least the first field; and

storing selected information corresponding to the second transaction request at an address based on the digest value.

54. A system for switching transaction requests among a plurality of servers, comprising:

an input port for receiving, from a first server in the plurality of servers, a transaction response of the first server, the transaction response corresponding to at least a first transaction request;

means for parsing the transaction response to locate at least a first field;

means for determining a first tag identifying the first server;

means for appending the first tag to the first field in the transaction response;

means for reassembling the transaction response;

means for forwarding the transaction response to a client identified by the transaction response, wherein the input port receives a second transaction request;

means for parsing the second transaction request for at least the first field;

means for determining a digest value based on field information in the at least the first field; and

means for storing selected information corresponding to the second transaction request at an address based on the digest value.

Although the Applicant believes that no fees are due for filing this Comments on Statement of Reasons for Allowance, please charge any fees deemed necessary to Deposit Account No. 19-1970.

Respectfully submitted,

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Date: Feb. 22, 2006

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